

C. Remarks

Applicants have amended the claims so as to clarify and more particularly indicate the claimed subject matter. The amendment is made for the sole purpose of expediting prosecution and not in response to any ground or reason of patentability presented by the USPTO. Claims 16-22 have been withdrawn from prosecution, since Group I was elected. Applicants reserve the right to prosecute canceled claims, as well as the originally presented claims, in continuation applications.

Note that claims 9-11 have been amended in response to the Examiner's recognition that claims 9-12 are patentable. In view of these amendments, therefore, claims 9-12 are in immediate condition for allowance. No new matter is added. *Claims 1-12 are under examination.*

Novelty

Rejection of Claims 1 and 2 under 35 U.S.C. §102(a)

Claims 1 and 2 were rejected under 35 U.S.C. §102(a) as anticipated by Mesfin et al. (**C7** on the Information Disclosure Statement). Applicants traverse in view of the amendments made herein, which clarify that SEQ ID NO: 6 (*i.e.*, EMTPVNPG) is not being claimed, only peptides eight to twenty amino acids long which are *hydrophilic analogs* of an alpha-fetoprotein having SEQ ID NO:6. Accordingly, claims 1 and 2 are not anticipated, and withdrawal of the rejection is respectfully requested.

Rejection of Claims 1-3, 5 and 13 under 35 U.S.C. §102(a)

Claims 1-3, 5 and (now-cancelled claim) 13 were rejected under 35 U.S.C. §102(a) as anticipated by Mesfin et al. (**C8**). Applicants traverse. This reference is not prior art under 35 U.S.C. §102(a) because it was published after Applicants invented the subject matter of the present case. Firstly, the **C8** reference was not published until March 2001 (please see the footer at the bottom of the page of **C8**). Secondly, Applicants' provisional patent application 60/208,614 – filed with the U.S. Patent and Trademark Office in June 2000, discloses EMTOVNQG (see page 2, numbered paragraph 5, where "H" denotes hydroxyproline, which is designated "O" in the present patent application.) Withdrawal of the rejection is therefore in order and is respectfully requested.

Rejection of Claims 1-3, 5 and 13 under 35 U.S.C. §102(b)

Claims 1-3, 5 and 13 were rejected under 35 U.S.C. §102(b) as anticipated by Jacobson et al. (**C5**). Applicants traverse. The reference was not published, *i.e.*, online, until at least after August 28, 2000 – not more than one year prior to June 2, 2001. Prior to that date, the cited abstract was available only to the author Jacobsen, and then only by password access. The reference is therefore not prior art under 35 U.S.C. §102(b). The rejection is also moot as to canceled claim 13. Withdrawal is respectfully requested.

Rejection of Claims 1, 2, 13 and 14 under 35 U.S.C. §102(b)

Claims 1, 2, 13 and 14 were rejected under 35 U.S.C. §102(b) as anticipated by Vakharia et al. (**U** in the Examiner's List of References Cited, form PTO-892.) Applicants traverse in view of the amendments made herein, which clarify that SEQ ID NO: 6 (or EMTPVNPGV, for that matter) is not claimed, only eight to twenty amino acids long peptides which are hydrophilic analogs of an alpha-fetoprotein having SEQ ID NO:6. (The rejection is also moot as to canceled claims 13 and 14.) Accordingly, the rejection is moot, and withdrawal is respectfully requested.

Rejection of Claims 1 and 2 under 35 U.S.C. §102(b)

Claims 1 and 2 were rejected under 35 U.S.C. §102(b) as anticipated by Cantley et al. (**A** on the PTO-892 form.) Applicants traverse.

The peptide disclosed in Cantley (RRPVSPGKD) does not anticipate claims 1 and 2 as amended, firstly since Cantley, in his SEQ ID NO: 36 peptide or elsewhere, does not teach or suggest hydrophilic analogs, having antiestrotrophic activity, of an alpha-fetoprotein having SEQ ID NO:6. (Cantley's peptide is a predicted phosphorylation site for HIV Enhancer-Binding Protein 2.) The Cantley peptide is not believed by the inventors to be a hydrophilic analog of the present SEQ ID NO: 6. Furthermore, Cantley's SEQ ID NO: 36 peptide, *inter alia*, has three positively charged side chains, which are believed to make the peptide devoid of antiestrotrophic activity, and therefore unsuitable for the uses described in Applicants' specification. The peptides claimed in claim 1 and 2 have antiestrotrophic activity. Therefore, since Cantley does not anticipate claims 1 and 2, Applicants respectfully request withdrawal of the rejection.

Rejection of Claims 1-3, 6-8 and 13-14 under 35 U.S.C. §102(b)

Claims 1-4 and 13-14 were rejected under 35 U.S.C. §102(b) as anticipated by Misejewski et al. (**A2** on the IDS.) Applicants traverse, noting first that the rejection is moot as to claims 13 and 14, in view of Applicants' cancellation herein of those claims.

As for claims 1-4, Misejewski does not teach the presently claimed invention. The present claims are directed to eight to twenty amino acid long antiestrotrophic peptides which are hydrophilic analogs of SEQ ID NO:6 proteins. These peptides, including those recited in, e.g., claim 5, are not taught (or fairly suggested) by Misejewski, including the sequences cited by the Examiner. Accordingly, the rejection is moot, and withdrawal is respectfully requested.

Rejection of Claims 1-4 and 13-14 under 35 U.S.C. §102(e)

Claims 1-4 and 13-14 were rejected under 35 U.S.C. §102(e) as anticipated by Krystal et al. (**B** on the PTO-892 form.) Applicants traverse.

The cited peptide Krystal discloses (SVDVEYTVQFTPLNPD) does not anticipate claims 1-4 (13-14 are canceled herein) as amended. The Krystal peptide (or the patent disclosure) does not teach or suggest hydrophilic analogs, having antiestrotrophic activity, of an alpha-fetoprotein having SEQ ID NO:6. While Krystal's anti-apoptotic peptides are disclosed for a very broad range of conditions, the specification does not teach or suggest the claimed peptides. Applicants do not claim all analogs of SEQ ID NO:6, just those meeting the claim language.

The Krystal peptide is not a hydrophilic analog of the present SEQ ID NO: 6. As such, the peptide is believed to make the peptide devoid of antiestrotrophic activity – which is consistent with the total lack of teaching of same in the specification - and therefore unsuitable for the uses described in Applicants' specification. Applicants' peptides claimed in claims 1-4 have antiestrotrophic activity. Therefore, since Cantley does not anticipate claims 1-4, Applicants respectfully request withdrawal of the rejection.

Obviousness

Rejection of Claims 1 and 13-15 under 35 U.S.C. §103(a)

Claims 1 and 13-15 were rejected under 35 U.S.C. §103(a) as anticipated by Misejewski et al. (**A2** on the IDS) or Krystal et al in view of the statement in Applicants' specification at page 9, lines 20-25. Applicants traverse as follows.

Applicants note that the part of the rejection applying either the Misejewski or Krystal reference combined with the statement in the specification regarding carriers and stabilization excipients should be properly applied only to (now-canceled) claims 13-15, as claim 1 does not recite these elements. Therefore, since claims 13-15 have been canceled herein without prejudice or disclaimer, Applicants submit that this part of the rejection is therefore moot. Cancellation of claims 13-15 is being done to expedite prosecution and is not to be considered acquiescence to the rejection. Withdrawal of the rejection is proper and is respectfully requested.

With respect to claim 1, Applicants note that the cited references (including the particular points cited by the Examiner in the Office Action) do not render the claimed invention obvious under 35 U.S.C. §103(a), singly or combined. While Misejewski does disclose growth-inhibitory peptides SEQ IDs 4 and 5 (cited by the Examiner), it does not provide an enabling teaching that hydrophilic analogs of Applicants' SEQ ID NO:6, EMTPVNPG, may be obtained which have not only better or equal activity, but are more stable upon extended storage.

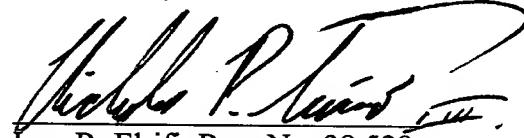
And the teachings of Krystal do not add anything to the Misejewski teachings to render claim 1 obvious, either. As noted above, Krystal's specification does not relate to the subject matter of Applicants' invention, so one of ordinary skill in the art would not likely consider this reference in relation to the present subject matter, much less in combination with Misejewski. Krystal teaches anti-apoptotic peptides which are not hydrophilic analogs of the present SEQ ID NO: 6 as presently claimed. Krystal does not teach or suggest hydrophilic analogs, having antiestrotrophic activity. Thus, since the cited references do not teach or suggest the presently claimed invention of claims 1-4, Applicants respectfully submit that the 35 U.S.C. §103(a) rejection over Misejewski and Krystal is overcome, and that the rejection should therefore be withdrawn.

Summary

On the basis of the foregoing amendments, Applicants respectfully submit that the pending claims are in condition for allowance. If there are any questions regarding these amendments and remarks, the Examiner is encouraged to contact either of the undersigned at the telephone number provided below.

If a telephone conversation with Applicant's attorney would help expedite the prosecution of this application, the Examiner is invited to call at (617) 542-6000.

Respectfully submitted,



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